

Claims 1 and 2 have been rejected under 35 U.S.C. 102(b) as being anticipated by Estes, Jr., U.S. 5,013,931.

The rejections under 35 USC §§ 102 and 112 are respectfully traversed for reasons explained in the following remarks.

Rejection of claims 3-25 under 35 USC §112, first paragraph.

The Examiner has rejected claims 3-25 based on the assertion that the invention is not enabled by the specification because the circuit providing power to the amplifier is not disclosed or included in the claims.

First, a Power Source 200 is disclosed in the specification (page 9, lines 18-19) and in the drawings (Fig.'s 1 and 2). The disclosure in text and schematically in the drawings of "a source of alternating current" is sufficient to inform one of skill in the art of the requirement of an AC current source, and thereby enables the invention.

Second, the power supply is not considered by applicant to be an element of the claimed invention, but rather an aspect of the environment in which the invention operates. The invention functions in conjunction with an alternating current power source. The power source is not to be understood as being part of the invention. In a typical application, the power source is the public utilities power grid. The power source is generalized in the abstract, the specification and in figures 1 and 2 as Power Source 200. Notice that each of the two terminals of the power source must be available for connection to the invention according to the cited figures.

In many practical situations one terminal of the power source is not available for connection to the invention according to the cited figures because it is already connected

to ground. This is the case for the public utilities power grid. The connection to ground forbids connection to the output of amplifier 13 (figure 1) without shorting the output of amplifier 13 to ground. To address this problem, transformer 201 (figure 3,4) is used, providing the power source with two terminals that are each available for proper connection to the power conditioner. When the embodiment of the invention includes transformer 201, it is to be understood that the primary winding of transformer 201 is excited by an external power source that is, again, not part of the invention. Therefore, Power Source 200 (figure 1, 2) is not a part of the invention, while transformer 201 (figure 3, 4) is a part of the invention.

Applicant submits that the invention is enabled and patentable under 35 USC §112, first paragraph.

Rejection of claims 3-25 under 35 USC §112, second paragraph.

The Examiner has rejected claims 3 – 25 based on the assertion that there is no support in the specification for the “second secondary winding” providing the necessary power. There appears to be a misunderstanding on the part of the Examiner that the secondary winding supplies AC signals, and the amplifier is presumed to require a DC signal.

The power supplied by the second secondary winding is introduced to the primary winding of the transformer by an external source of AC power as referenced in the claims and specification, and as was described in detail above. The AC power source referred to in claim 3 is that shown in Fig.'s 1 and 2 at 200, and referred to in the specification, e.g. at page 9, lines 18-19.

The amplifier of claim 1, referenced by claim 3, is not precluded from receiving power from the "second secondary winding" of the transformer. While it is generally true that amplifiers operate from DC power, it is common to the art for amplifiers to contain rectifying and filtering circuits that convert AC power into DC power. If the Examiner's argument were valid, one could not justify the operation of any amplifier from the AC power grid.

Applicant submits that the invention is enabled and patentable under 35 USC §112, second paragraph.

Rejection of claims 1-2 under 35 USC §102.

The Examiner has rejected claims 1-2 as anticipated by Estes Jr. and unpatentable under 35 USC §102.

In order to anticipate under 102 the cited reference must disclose each and every element of the claims. Estes Jr. does not include each and every element of either claim 1 or claim 2.

The Examiner has not identified in Estes Jr each of the elements of either claim 1 or claim 2. The Examiner does not point out where each element of the claimed invention is disclosed in Estes, other than to say that the isolation transformer, a feedback control loop, a voltage reference ground an output scaler and an amplifier are disclosed and "connected and operating similarly". The Examiner is respectfully requested to point out the disclosure in Estes of the invention of either claim 1 or claim 2.

The power conditioner of claims 1 and 2 is a linear, real time control system that acts to remove harmonic and spurious distortion and noise from an external source of AC

power. Estes describes the invention as a device that transforms a square wave input into a triangular wave.

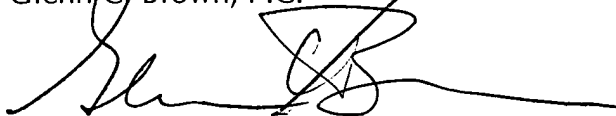
Estes discloses a control system that controls the amplitude of a signal only; it does not operate in real time to instantaneously correct the distortion of the waveform owing to harmonic and spurious noise components.

Applicant submits that the Examiner has not made a prima facie case of anticipation by the general citation of Estes, and the conclusory statement that Estes discloses some, but not all elements of the invention of claims 1 and 2, and that those cited elements are "connected and operating similarly" to the invention of claims 1 and 2.

#### CONCLUSION

Applicant respectfully submits that each of the Examiner's rejections has been overcome, and that this application is in condition for allowance. Such is respectfully requested. The examiner is invited to call the undersigned if doing so would be of benefit in advancing prosecution of the application.

Respectfully submitted,  
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